CODEN [USA]: IAJPBB ISSN: 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES

Available online at: http://www.iajps.com *Research Article*

# HEMATOLOGICAL EVALUATION OF PATIENTS WITH HELICOBACTER PYLORI INFECTION

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**Article Received:** June 2019 **Accepted:** July 2019 **Published:** August 2019

**Abstract:**

***Objective:*** *To evaluate the hematological features of patients with helicobacter pylori infection.*

***Patients And Methods:*** *A total of fifty patients of Helicobacter pylori infection were explored and included in the study. The cross-sectional survey includes patients of ≥18 year of age diagnosed as H. pylori infection either gender while the exclusion criteria were patients with pregnant and lactating mothers, already on chemotherapy, iron and vitamin B12 supplements, known cases of hematological malignancy and history of blood transfusion and the participants who refused to give consent for the study. The hematological parameters will be explored through clinical history examination, physical examination and specific investigations as required whereas the frequency / percentages (%) and means ±SD computed for study variables.*

***Results:*** *During six month study period total fifty patients with H. pylori were explored and study. The mean ± SD for age (yrs) of population was 42.74±6.75. Regarding gender distribution male 35 (70%) and female 15 (30%). Regarding the hematological manifestation iron deficiency 25 (50%), vitamin B12 (cobalamina) deficiency 10 (20%), Gastric MALT lymphoma 04 (8.0%) and Immune thrombocytopenia 11 (22%).*

***Conclusion:****The acknowledgment of hematologic infections related with H. pylori contamination and their consideration as signs for study.*

**Keyword's:** *Helicobacter pylori, hematology and iron deficiency anemia.*

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*Please cite this article in press Syed Zulfiquar Ali Shah et al.,* ***Hematological Evaluation Of Patients With Helicobacter Pylori Infection.,*** *Indo Am. J. P. Sci, 2019; 06[08].*

## INTRODUCTION:

Helicobacter pylori (H. pylori) is a gram-negative, microaerophilic, winding molded and lashed bacterium contaminating about a large portion of the total populace whose principle store is the human stomach. The predominance of contamination changes by geographic territory, age, ethnicity and financial status; truth be told, the pervasiveness is higher in developing nations and in those with poor financial conditions[1, 2]. H. pylori has microbiological qualities that enable it to make due in incredibly unfavorable conditions, for example, the gastric acidic condition. Transmission of the disease happens essentially through the oral-fecal route [3], specifically through polluted water and sustenance. Oral-oral transmission is likewise conceivable, as appeared by the confinement of the bacterium in salivation and dental plaque. In the 30 years that have passed since its disclosure, more than 50 extragastric indications of H. pylori disease have been accounted for, including a scope of medicinal specializations including dermatology, gynecology and obstetrics, cardiology, endocrinology, pulmonology, ophthalmology, otorhinolaryngology, nervous system science, pediatric medicine, odontology and hematology [4-6]. Hematological signs are the subject of this audit. Hematological pattern that are perceived as extragastric appearances of H. pylori disease and considered as hematological dysfunction that ought not be just tended to but rather needs to oversee on need premise to counteract the patient procure perilous inconveniences.

## PATIENTS AND METHODS:

A total of fifty patients of Helicobacter pylori infection were explored and included in the study. The cross-sectional survey includes patients of ≥18 year of age diagnosed as H. pylori infection either gender while the exclusion criteria were patients with pregnant and lactating mothers, already on chemotherapy, iron and vitamin B12 supplements, known cases of hematological malignancy and history of blood transfusion and the participants who refused to give consent for the study. The hematological parameters will be explored through clinical history examination, physical examination and specific investigations as required. The data was collected on pre-designed proforma and analyzed in SPSS to manipulate the frequencies and percentages.

## RESULTS:

During six month study period total fifty patients with H. pylori were explored and study. The mean ± SD for age (yrs) of population was 42.74±6.75. The demographical and clinical profile of study population is presented in Table 1.

**TABLE 1:** The Demographical And Clinical Profile Of Study Population

| Parameter | Frequency (N=50) | Percentage (%) |
|---|---|---|
| **AGE** (yrs) | | |
| 20-29 | 10 | 20 |
| 30-39 | 12 | 24 |
| 40-49 | 14 | 28 |
| 50-59 | 08 | 16 |
| 60+ | 06 | 12 |
| **GENDER** | | |
| Male | 35 | 70 |
| Female | 15 | 30 |
| **RESIDENCE** | | |
| Urban | 29 | 58 |
| Rural | 21 | 42 |
| **CO-MORBIDITIES** | | |
| Obesity | 22 | 44 |
| Dyslipidemia | 12 | 24 |
| Diabetes Mellitus | 20 | 40 |
| Hypertension | 18 | 36 |
| **HEMATOLOGICAL MANIFESTATION** | | |
| Iron deficiency | 25 | 50 |
| Vitamin B12 (cobalamina) deficiency | 10 | 20 |
| Gastric MALT lymphom | 04 | 8.0 |
| Immune thrombocytopenia | 11 | 22 |

## DISCUSSION:

The connection between H. pylori and iron lacks, paying little respect to whether the last is joined by pallor, was first portrayed by Blecker et al[7] in Belgium. All previous distribution have loaned logical help to the diverse worldwide rules that show that H. pylori ought to be looked for and destroyed in iron lack cases. Pernicious anemia as a phase of interminable nutrient B12 deficient was the first extragastric infection to be related with H. pylori disease, as hypothesized in established researchers by O'Connor et al [8]. Also, it was realized that there was a relationship of H. pylori with stomach disease, and it was at that point broadly perceived by mainstream researchers that that pernicious anemia was firmly identified with the advancement of stomach cancer[9]. This affiliation was as of late checked by Vanella et al[10]. Garcia Perez et al [11] depicted the relationship of H. pylori with immune thrombocytopenic purpura without precedent for 1993 in Spain, detailing a patient with immune thrombocytopenic purpura in whom the platelet tally was standardized after annihilation of H. pylori. Since the main arrangement substantiated the relationship of H. pylori contamination with immune thrombocytopenic purpura [12], it is conceivable to discover 40 extra case arrangements in the therapeutic writing in 2014 that reliably demonstrate the relationship of H. pylori annihilation with the recuperation of platelet tallies. Extranodal minimal zone lymphoma, better known by the abbreviation MALT lymphoma, is characterized as a poor quality harmful lymphoma of the stomach starting from B cells and is related with constant disease by H. pylori[13].

## CONCLUSION:

The acknowledgment of hematologic infections related with H. pylori contamination and their consideration as signs for study and destruction speaks to a profound change in the treatment worldview of these illnesses and an incredible achievement for humanity

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